

Serial No. 10/810,297

Art Unit: 2883
RECEIVED
CENTRAL FAX CENTER

OCT 25 2006

IN THE CLAIMS:

This listing of the claims replaces all prior versions, and listings, of the claims in the application.

1. (Currently Amended) A mounting arrangement for at least one optical component in a planar lightwave circuit, the arrangement comprising:
a substrate,
an input optical fiber associated with said substrate,
an output optical waveguide in a given set of planar layers of said substrate,
said ~~at least one optical component being is mounted~~able on said substrate to transmit optical radiation from said input optical fiber to said output optical waveguide, and

a ~~length-offurther~~ optical waveguide is disposed on said substrate in the same planar layers of said output optical waveguide wherein said output optical waveguide and said further optical waveguide are aligned along an input-to-output propagation path, thereby providing substantial alignment of said output optical waveguide and said further optical waveguide, said ~~length-offurther~~ optical waveguide ~~being is~~ interposed between said input optical fiber and said ~~at least one optical component~~ and wherein so that said at least one optical component is interposed between said ~~length-offurther~~ optical waveguide and said output optical waveguide.

2. (Previously presented) The arrangement of claim 1, wherein said substrate is a silicon optical bench (SiOB) support.

3-7. (Cancelled)

8. (Currently Amended) The arrangement of claim 17, wherein respective end surfaces of said output optical waveguide and said ~~length-offurther~~ optical waveguide are offset to a perpendicular to said input-to-output propagation path, and a propagation

Serial No. 10/810,297

Art Unit: 2883

path of radiation through said at least one optical component is at an angle with respect to said input-to-output propagation path.

9. (Previously presented) The arrangement of claim 1, wherein said at least one optical component comprises an optical isolator.

10. (Previously presented) The arrangement of claim 9, wherein said optical isolator is optimised for focused beams.

11. (Previously presented) The arrangement of claim 1, wherein said at least one optical component comprises an optical filter.

12. (Previously presented) The arrangement of claim 1, wherein said at least one optical component comprises at least one spherical or ball lens.

13. (Previously presented) The arrangement of claim 12, wherein said substrate comprises at least pyramidal hole for receiving said at least one spherical or ball lens.

14. (Previously presented) The arrangement of claim 1, wherein said at least one optical component comprises a symmetrical optical system having an internal image.

15. (Currently Amended) A mounting arrangement for at least one optical component in a planar lightwave circuit, the arrangement comprising:

a substrate,

an input optical fiber associated with said substrate,

an output optical waveguide in a given set of planar layers of said substrate,

said ~~at least one optical component being~~ is mounted ~~able~~ on said substrate to transmit optical radiation from said input optical fiber to said output optical waveguide, and

a ~~length of~~ further optical fiber associated ~~to~~ with said substrate between said at least one optical component and said output optical waveguide so that said ~~at least one~~

Serial No. 10/810,297

Art Unit: 2883

optical component is interposed between said input optical fiber and said length of optical fiber.

16. (Previously presented) The arrangement of claim 15, wherein said substrate is a silicon optical bench (SiOB) support.

17. (Previously presented) The arrangement of claim 15, wherein said substrate comprises at least one V-groove for receiving at least one of said input optical fiber and said length of optical fiber.

18. (Previously presented) The arrangement of claim 17, wherein said substrate comprises respective V-grooves for receiving said input optical fiber and said length of optical fiber, respectively, said respective V-grooves having the same geometry.

19. (Previously presented) The arrangement of claim 15, wherein said input optical fiber is associated with said substrate and said length of optical fiber, and wherein said input optical fiber and said length of optical fiber are from the same fiber batch.

20. (Previously presented) The arrangement of claim 15, wherein said input optical fiber and said length of optical fiber have respective end surfaces, said respective end surfaces comprising an anti-reflective coating.

21. (Previously presented) The arrangement of claim 15, wherein said at least one optical component comprises an optical isolator.

22. (Previously presented) The arrangement of claim 21, wherein said optical isolator is optimised for focused beams.

23. (Previously presented) The arrangement of claim 15, wherein said at least one optical component comprises an optical filter.

Serial No. 10/810,297

Art Unit: 2883

24. (Previously presented) The arrangement of claim 15, wherein said at least one optical component comprises at least one spherical or ball lens.

25. (Previously presented) The arrangement of claim 24, wherein said substrate comprises at least pyramidal hole for receiving said at least one spherical or ball lens.

26. (Previously presented) The arrangement of claim 15, wherein said at least one optical component comprises a symmetrical optical system having an internal image.